

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 (BALTIMORE NATIONAL PIKE) AT WINTERS LANE/ENTRANCE TO HOME DEPOT IN BALTIMORE COUNTY. THIS SIGNAL SHALL BE RECONSTRUCTED TO MAINTAIN FROM A SPAN WIRE DESIGN. THE DUAL LEFT TURN FOR EAST BOUND US 40 SHALL BE ELIMINATED AND A SINGLE LEFT TURN SHALL BE INSTALLED. COUNTDOWN PEDESTRIAN SIGNALS AND ACCESSIBLE PEDESTRIAN SIGNALS (APS) SHALL BE INSTALLED FOR THE NORTH AND SOUTH CROSSINGS OF US 40 (BALTIMORE NATIONAL PIKE) AND WINTERS LANE/HOME DEPOT ENTRANCE. OVERHEAD VIDEO DETECTION CAMERA'S SHALL BE INSTALLED FOR THE MAINLINE LEFT TURN ACTUATION, AND FOR THE SIDE STREET PRESENCE DETECTION. VIDEO DETECTION CAMERA'S SHALL ALSO BE USED FOR MAINLINE SAMPLING ON US 40. NON-INVASIVE PROBES SHALL BE INSTALLED FOR ADVANCE DETECTION ON US 40.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 7 NEMA PHASES. THE MAINLINE SHALL OPERATE USING EXCLUSIVE/PERMISSIVE LEFT TURN SIGNALS. WINTERS LANE AND THE ENTRANCE OF HOME DEPOT WILL OPERATE IN A THREE PHASES SIDE STREET SPLIT OPERATION. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL BE INSTALLED FOR THE MAINLINE AND SIDE STREET PEDESTRIAN CROSSINGS. ACCESSIBLE PEDESTRIAN PUSHBUTTON STATIONS SHALL ALSO BE USED FOR THE MAINLINE AND SIDE STREET PEDESTRIAN CROSSINGS.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. RANDALL SCOTT, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781/2785
MR. DAVID CREIGHTON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 321-2821
MR. MIKE PASQUARIELLO, DISTRICT UTILITIES ENGINEER
PHONE: (410) 321-2841
MR. STEVE MARCISZEWSKI, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761
MR. ROBERT SNYDER, TRAFFIC OPERATIONS DIVISION - TELEPHONE DROP
PHONE: (410) 787-7631
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING STANDARD PLATES FOR TRAFFIC CONTROL.

EQUIPMENT LIST

- A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	ECONOLITE ASC II CONTROLLER WITH TELEMETRY AND RACK MOUNTED AMPLIFIERS BASE MOUNTED (SIZE-6) CABINET WITH VIDEO INTERFACE EQUIPMENT	EA	1
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: D-3(2)(VAR.X16") MAST ARM MOUNT R3-5(L)(30"x36") MAST ARM MOUNT R3-5(R)(30"x36") MAST ARM MOUNT R10-11b(30"x30") MAST ARM MOUNT M95-1(MOD.) (72"x40") MAST ARM MOUNT R10-4(1)MOD.(9"x15") POLE MOUNT	SF EA EA EA EA EA	118 2 2 1 3 2 6

- B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	7
585620	12 INCH HEAT APPL. WHITE PERMANENT PREFORMED THERMO. PAVEMENT MARKING	LF	670
585624	24 INCH HEAT APPL. WHITE PERMANENT PREFORMED THERMO. PAVEMENT MARKING	LF	200
800000	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS SECTIONS	EA	6
800000	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION	EA	6
803000	NAVIGATOR CENTRAL CONTROL UNIT	EA	1
800000	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	9
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
800000	PULL BACK AND RE-ROUTE INTERCONNECT CABLE	LF	495
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	19
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	730
803015	INSTALL OVERHEAD SIGN	SF	118
805135	3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	560
805140	4 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	215
805150	3 INCH SCHED. 80 PVC CONDUIT-SLOTTED	LF	145
805155	4 INCH SCHED. 80 PVC CONDUIT-SLOTTED	LF	730
807202	METER SERVICE PEDESTAL	EA	1
810010	CABLE 1-CONDUCTOR, NO. 4 AWG-THHN/THWN	LF	45
810601	NONINVASIVE DETECTOR, 500 FOOT LEAD IN CABLE	EA	3
810605	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE	EA	4
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	12
816001	VIDEO DETECTION CAMERA	EA	7
816005	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	EA	3
816010	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	EA	4
818004	10 FOOT BREAKAWAY BASE PEDESTAL POLE	EA	5
818030	STEEL POLE WITH A SINGLE 38 FOOT MAST ARM	EA	1
818051	STEEL POLE WITH TWIN 70 FOOT AND 50 FOOT MAST ARMS	EA	2
831010	250 WATT HPS LAMP AND LUMINAIRE	EA	2
837001	GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH	EA	6
860274	12 INCH OPTICALLY PROGRAMMED SIGNAL HEAD SECTION	EA	14
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	42
860292	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	3
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	890
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	1525
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	2325
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	525
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

NOTE:

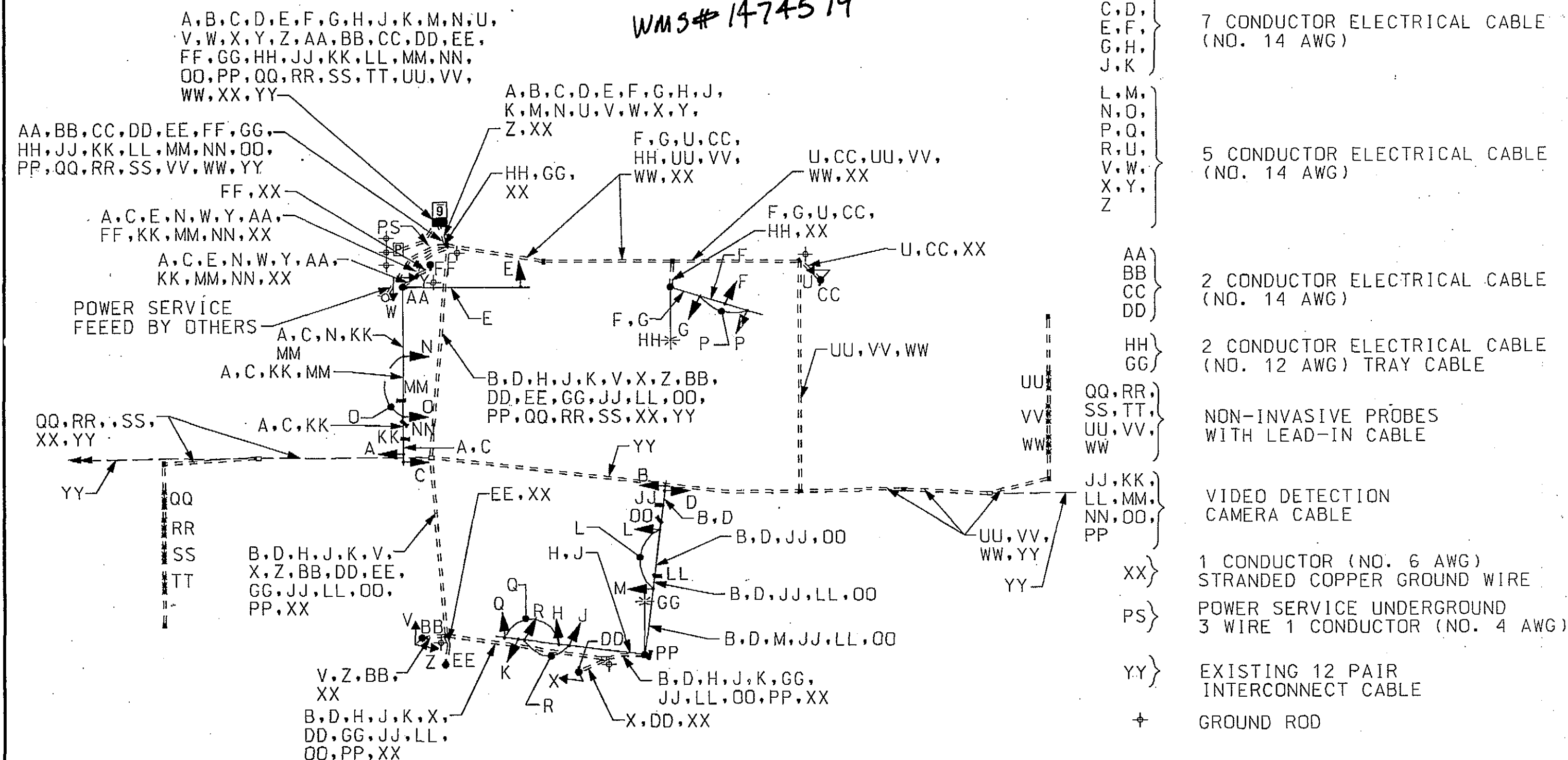
THE CONTRACTOR SHALL DELIVER APS UNIT TO SHA SIGNAL SHOP, PRIOR TO LOCATION INSTALLATION, FOR PROGRAMMING. SHA FORCES SHALL INSTALL CENTRAL CONTROL UNIT IN THE CABINET.

- C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	CONTROLLER	EA	1

WIRING DIAGRAM

WMS# 1474579



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**US 40 AND WINTERS LANE /
ENTRANCE TO HOME DEPOT**

CATONSVILLE, MARYLAND

GENERAL INFORMATION PLAN

SCALE: N/A DATE: 8/2008 CONTRACT NO. BA7715187

DESIGNED BY: S. SMITH COUNTY: BALTIMORE
DRAWN BY: S. SMITH LOGMILE: 03004002.16
CHECKED BY: S. RENZI TMS NO.: F471
FAP NO.: TOD NO.

TS NO. 883E DRAWING 2 OF 3 SHEET NO. 25 OF 31



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PLOTTED: Thursday, July 06, 2006 AT 09:00 AM